

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A sensor assembly for signaling wear conditions on contact bodies of pantographs of electrically driven vehicles, wherein the contact bodies are attached to metallic supports, characterized in that

the sensor assembly comprises blind holes (3) introduced into the contact body (2), transmission channels (6) in communication with the blind holes (3), and a monitoring unit, wherein the blind holes (3) and the monitoring unit are connected via the transmission channels (6), and that a medium which generates signals at a predetermined wear condition is disposed in the blind holes (3), and a medium which transmits these signals to the monitoring unit is disposed in the transmission channel.

2. (Original) The sensor assembly according to claim 1,
characterized in that

the medium generating the signal and the medium transmitting the signal are identical.

3. (Currently Amended) The sensor assembly according to claim 1 or 2,
characterized in that

the medium generating and transmitting the signal is a hydraulic fluid.

4. (Currently Amended) The sensor assembly according to claim 1 or 2,
characterized in that

the medium generating and transmitting the signal is an electrically conductive medium.

5. (Currently Amended) The sensor assembly according to claim 1 or 2,
characterized in that
the medium generating and transmitting the signal is a light-guiding medium.
6. (Original) The sensor assembly according to claim 1,
characterized in that
the medium generating the signal and the medium transmitting the signal are not identical.
7. (Currently Amended) The sensor assembly according to one of the claims 1 to 6,
characterized in that
the medium generating the signal is a current conductor (4), a light guide (5), a photodiode (8) or
a camera (9).
8. (Currently Amended) The sensor assembly according to one of the claims 1 to 7,
characterized in that
several blind holes (3) are arranged in spaced-apart relationship.
9. (Currently Amended) The sensor assembly according to one of the claims 1 to 8,
characterized in that
the blind holes (3) are arranged vertically.
10. (Currently Amended) The sensor assembly according to one of the claims 1 to 9,
characterized in that
the blind holes (3) have different hole depths (5).
11. (Currently Amended) The sensor assembly according to one of the claims 1 to 10,
characterized in that
each blind hole (3) or groups of blind holes (3) have separate transmission channels.

12. (Currently Amended) The sensor assembly according to ~~one of the~~ claims 1 to 11, characterized in that the blind holes (3) extend through a side face (24) of the contact body (2) with an acute angle in the direction of the contact surface (21).
13. (Currently Amended) The sensor assembly according to ~~one of the~~ claims 1 to 12, characterized in that the blind holes (3) have a cylindrical shape.
14. (Currently Amended) The sensor assembly according to ~~one of the~~ claims 1 to 12, characterized in that the blind holes (3) have a conical shape.
15. (Currently Amended) The sensor assembly according to ~~one of the~~ claims 1 to 13, characterized in that the medium generating the signal is disposed at a hole bottom (31) of the blind hole (3).
16. (Currently Amended) The sensor assembly according to ~~one of the~~ claims 1 to 14, characterized in that the photodiode (8) or the camera (9) are arranged in the area of a hole entrance opening (33) of the blind hole (3).
17. (Currently Amended) The sensor assembly according to ~~one of the~~ claims 1 to 16, characterized in that the photodiode (8) or the camera (9) are arranged in a conical blind hole (3).

18. (Currently Amended) The sensor assembly according to ~~one of the~~ claims 1 to 17, characterized in that

in addition, a hydraulic fluid is disposed in the blind holes (1), in which a photodiode (8), a camera (9) over a light guide (5) are arranged, and in the associated transmission channels (6).

19. (Currently Amended) The sensor assembly according to ~~one of the~~ claims 1 to 18, characterized in that

the transmission channels (6), which are in communication with the blind holes (3), are arranged in the support (7) below the contact body (2) and are connected from there to the monitoring unit via additional transmission channels.

20. (Currently Amended) The sensor assembly according to ~~one of the~~ claims 1 to 19, characterized in that

the transmission channels (6), which are in communication with the blind holes (3), are arranged outside the support and are connected from there to the monitoring unit via additional transmission channels.

21. (Currently Amended) The sensor assembly according to ~~one of the~~ claims 1, 2, or 8 to 19, characterized in that

the transmission channels (6) are implemented as hoses, tubes, support channels, light guides or current conductors.

22. (Currently Amended) The sensor assembly according to ~~one of the~~ claims 1 to 21, characterized in that

a signal acquisition and processing unit is integrated in the monitoring unit.